A CLEC demarcation point shall be established either in the main telco room of a building where a customer is located or, if the building does not have a main telco room, then at a location to be determined by Verizon. Verizon shall connect a Dark Fiber Loop to the demarcation point by installing a fiber jumper.

7.2.2 MCIm may access a Dark Fiber Loop only at a pre-existing hard termination point of such Dark Fiber Loop, and MCIm may not access a Dark Fiber Loop at any other point, including, but not limited to, a splice point. Verizon will not introduce additional splice points or open existing splice points to accommodate MCIm's request. Unused fibers located in a cable vault or a controlled environment vault, manhole or other location outside the Verizon Wire Center, and not terminated to a fiber patch, are not available to MCIm.

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- 7.2.4 Verizon shall perform all work necessary to install a cross connection or a fiber jumper, including, but not limited to, the work necessary to connect a dark fiber to a demarcation point, a fiber distribution frame or a POT bay.
- 7.2.5 At the customer premise, unused fibers are not available to MCIm pursuant to this Attachment unless such fibers terminate on a fiber patch panel. Unused fibers in a fiber splice point located outside the customer premise are not available to MCIm.
- 7.2.6 Dark Fiber will be offered to MCIm in the condition that it is available in Verizon's network at the time that MCIm submits its request (i.e., "as is"). In addition, Verizon shall not be required to convert lit fiber to Dark Fiber for MCIm's use.
- 7.2.7 Spare wavelengths on fiber strands, where Wave Division Multiplexing (WDM) or Dense Wave Division Multiplexing (DWDM) equipment is deployed, are not considered to be spare Dark Fiber Loops and, therefore, will not be offered to MCIm as Dark Fiber.
- 7.2.8 MClm shall be responsible for providing all transmission, terminating and regeneration equipment necessary to light and use Dark Fiber.
- 7.2.9 MCIm may not resell Dark Fiber purchased pursuant to this Attachment to third parties.
- 7.2.10 In order for Verizon to continue to satisfy its carrier of last resort (COLR) obligations under Applicable Law and/or to preserve the efficiency of its network, Verizon may, upon a showing of need to the Commission, limit MCIm to leasing a maximum of twenty-five percent (25%) of the Dark Fiber in any given segment of Verizon's network during any two-year period. In addition, except as otherwise required by Applicable Law, Verizon may take any of the following actions, notwithstanding anything to the contrary in this Agreement:
  - 7.2.10.1 Revoke Dark Fiber leased to MCIm upon a showing of need to the Commission and twelve (12) months' advance written notice to MCIm; and

- 7.2.10.2 Revoke Dark Fiber leased to MCIm upon a showing to the Commission that MCIm underutilized fiber (less than OC-12) within any twelve (12) month period.
- 7.2.10.3 Verizon may reserve Dark Fiber for maintenance purposes, or to satisfy customer orders for fiber related services. Verizon reserves and shall not waive, Verizon's right to claim before the Commission that Verizon should not have to fulfill an MCIm order for Dark Fiber because that request would strand an unreasonable amount of fiber capacity, disrupt or degrade service to customers or carriers other than MCIm, or impair a Verizon obligation to serve as a carrier of last resort.

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- 7.2.12 MCIm shall be solely responsible for: (a) determining whether or not the transmission characteristics of the Dark Fiber accommodate the requirements of MCIm; (b) obtaining any Rights of Way, governmental or private property permit, easement or other authorization or approval required for access to the Dark Fiber; (c) installation of fiber optic transmission equipment needed to power the Dark Fiber to transmit Telecommunications Services traffic; (d) installation of a demarcation point in a building where a customer is located; and (e) augmenting MCIm's collocation arrangements with any proper optical cross connects or other equipment that MCIm needs to access Dark Fiber before it submits an order for such access.
- 7.3 Dark Fiber Interoffice Facilities (IOF).

The Dark Fiber IOF UNE is defined as fiber strand(s) that are located within a fiber optic cable sheath between either (a) two or more Verizon central offices or (b) a Verizon central office and an MCIm central office but, in either case, without attached multiplexing, aggregation or other electronics. Dark Fiber IOF is available between MCIm's collocation arrangements within two or more Verizon Central Offices, or between MCI's collocation arrangement in a Verizon Central Office and an MCIm CO/POP. To the extent applicable, the same terms and conditions regarding Dark Fiber Loop UNEs shall govern the Dark Fiber IOF UNE.

- A Dark Fiber inquiry form must be submitted prior to submitting an ASR. Upon receipt of MCIm's completed inquiry form, Verizon will initiate a review of its cable records to determine whether dark fiber may be available between the locations and in the quantities specified. Verizon will respond within fifteen (15) Business Days from receipt of MCIm's request, indicating whether unbundled Dark Fiber may be available (if so available, such response being a "Confirmation") based on the records search except that for voluminous requests or large, complex projects, Verizon reserves the right to negotiate a different interval. Verizon shall hold such requested Dark Fiber for MCIm's use for ten (10) Business Days from MCIm's receipt of Confirmation and may not allow any other party to use such media, including Verizon. Verizon shall provide Dark Fiber on a first come, first served basis.
- 7.5 MCIm shall order Dark Fiber IOF and Dark Fiber Loop UNEs by sending to Verizon a separate ASR for each A to Z route.

7.6 Direct access to Dark Fiber Loops, Subloops, or IOF that terminates in a Verizon premise, must be accomplished via a collocation arrangement in that premise. In circumstances where collocation cannot be accomplished in the premises, the Parties agree to negotiate for possible alternative arrangements.

#### 8 Network Interface Device

- 8.1 **Definition**. "Network Interface Device" or (NID) includes any means of interconnection of customer premises wiring to Verizon's Distribution plant, such as a cross connect device used for that purpose.
- 8.2 Verizon shall permit MCIm to connect MCIm's loop facilities to the on-premises wiring of a customer through Verizon's NID in the manner set forth in Section 8.3.

## 8.3 Access to Network Interface Device

- 8.3.1 Due to the wide variety of NIDs utilized by Verizon (based on customer size and environmental considerations), MCIm may access the customer's inside wire by any of the following means:
  - 8.3.1.1 Verizon shall allow MCIm to connect its loops directly to Verizon's multi-line residential NID enclosures that have additional space and are not used by Verizon or any other Telecommunications Carrier to provide service to the premise. MCIm agrees to install compatible protectors and test jacks, to maintain the protection system and equipment.
  - 8.3.1.2 Where an adequate length of inside wire is present and environmental conditions permit, and with the subscriber authorization required by this Agreement and Applicable Law, either Party may remove the inside wire from the customer's side of the other Party's NID and connect that wire to that Party's own NID; or
  - 8.3.1.3 Enter the subscriber access chamber or "side" of "dual chamber" NID enclosures for the purpose of extending a connecterized or spliced jumper wire from the inside wire through a suitable "punch-out" hole of such NID enclosures; or
  - 8.3.1.4 Request Verizon to make other rearrangements to the inside wire terminations or terminal enclosure on a time and materials cost basis to be charged to the requesting Party (i.e., MCIm, its agent, the building owner or the subscriber). Such charges will be billed to the requesting Party.
- 8.3.2 In no case shall MCIm remove or disconnect ground wires from Verizon's NIDs, enclosures, or protectors.
- 8.3.3 Due to the wide variety of NID enclosures and outside plant environments, Verizon will work with MCIm to develop specific procedures to establish the most effective means of implementing this Section 8.3.

## 8.4 Technical Requirements

8.4.1 The NID shall provide an accessible point of connection for the

- subscriber-owned inside wiring, for Verizon's facilities, for the distribution media and/or cross connect to MCIm's NID, and shall maintain a connection to ground.
- 8.4.2 The NID shall be capable of transferring electrical analog or digital signals between the subscriber's inside wiring and the distribution media and/or cross connect to MCIm's NID, consistent with the NID's function at the Effective Date of this Agreement.
- 8.4.3 Where a Verizon NID exists, it is provided in its "as is" condition. MCIm may request that Verizon do additional work to the NID in accordance with Section 8.3.1.4.

#### 9 Unbundled Switching Elements

- 9.1 Local Switching. Verizon shall provide MCIm unbundled, Non-Discriminatory access to Local Switching (including the ability to route to MCIm's transport facilities, dedicated facilities, and systems) at cost-based rates in accordance with Applicable Law; provided, however, that Verizon may charge the market-based rates set forth in the Pricing Attachment for Local Switching for MCIm's provision of local service to customers who have four or more voice grade (DS0) or equivalent lines at one location in the density zone 1 of the Washington, D.C. and Norfolk-Virginia Beach-Newport News Metropolitan Statistical Areas (as defined as of January 1, 1999 under Section 69.123 of the FCC's rules), if Verizon also provides to MCIm throughout the relevant density zone 1 Non-Discriminatory access at cost-base rates in accordance with Applicable Law to Loop/Transport Combinations (including multiplexing/concentration equipment.
  - 9.1.1 Definition. Local Switching is the Network Element that provides MCIm the ability to use switching functionality in a Verizon end office switch, including all vertical services, features, functions, and capabilities of a switch that Verizon already provides. MCIm may request modifications to the switching functionality, including the vertical services and/or features, available in a Verizon end office switch pursuant to the BFR process set forth in this Attachment. Local Switching will be provisioned with a port element, which provides line or trunk side access to Local Switching.
  - 9.1.2 "Port element" or "port" means a line card (or equivalent) and associated peripheral equipment on an end office switch which serves as the interconnection between individual loops or individual subscriber trunks and the switching components of an end office switch and the associated switching functionality in that end office switch. Each port is typically associated with one (or more) telephone number(s) which serves as the subscriber's network address. The Port element is part of the provision of Local Switching.
  - 9.1.3 Local Switching includes white page listing, line side and trunk side facilities and all features, functions, and capabilities of the switch, including, but not limited to:
    - 9.1.3.1 The basic switching function of connecting lines to lines, lines to trunks, trunks to lines, and trunks to trunks, as well as the same basic capabilities made available to Verizon's customers, such as a telephone number, and dial tone; and

- 9.1.3.2 All other features that the switch is capable of providing, including, but not limited to, custom local area signaling service features, and Centrex. Components of Local Switching, to the extent that they are separately charged, shall be charged at the rates set forth in the Pricing Attachment.
- 9.1.4 Verizon shall offer, as an optional chargeable feature, daily usage tapes that include the "to and from" number, start time, and stop time, by line port, for all recorded local, access, and toll usage. MCIm may request activation or deactivation of features on a per port basis at any time, and shall compensate Verizon for the non-recurring charges associated with processing the order.
- 9.2 Local Switching Technical Requirements
  - 9.2.1 Verizon shall route calls to the appropriate trunk or lines for call origination or termination.
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  - 9.2.3 Verizon shall provide standard recorded announcements at Parity.
  - 9.2.4 Where requested by MCIm, Verizon will attempt to change a subscriber from Verizon's services to MCIm's services without loss of feature availability and functionality. However, depending on the technical arrangements MCIm chooses to use to provide their end user services, some feature interaction conflicts and resulting loss of feature availability and functionality may result.
  - 9.2.5 For unbundled Verizon switching in Combination with an unbundled Verizon loop, Verizon shall perform routine testing (e.g., mechanized loop tests (MLT)) at Parity upon receipt of a trouble report from MCIm.
  - 9.2.6 Verizon shall repair, restore and maintain Verizon-provided equipment that has produced trouble conditions, at Parity and in a Non-Discriminatory manner, to minimize recurrence of trouble conditions in MCIm's use of Local Switching.
  - 9.2.7 Verizon shall control congestion points such as mass calling events, and network routing abnormalities, using capabilities such as automatic call gapping, automatic congestion control, and network routing overflow at Parity and in a Non-Discriminatory manner.
  - 9.2.8 Verizon shall record billable events, involving usage of the element, and send the appropriate recording data to MCIm as agreed to by the Parties.
  - 9.2.9 Unbundled switching will include 911 access on the same basis as such access is provided in Verizon's network.
  - 9.2.10 Verizon shall provide switching service point (SSP) capabilities and signaling software to interconnect the signaling links destined to Verizon STPs at Parity. In the event that Local Switching is provided out of a switch without SS7 capability, and Verizon unbundled Shared Transport is purchased for use with Verizon's unbundled switching, Verizon's Tandem Office Switches shall provide this capability at Parity.

- 9.2.11 Verizon shall provide interfaces to Adjunct Equipment, which interfaces are identified in this Agreement, at Parity. Verizon shall provide interfaces to any other Adjunct Equipment at Parity pursuant to the BFR process.
- 9.2.12 Verizon shall assign each MCIm subscriber line an unbundled switching class of service. MCIm may request and Verizon will provide call blocking options (e.g., 900, 976) at Parity.
- 9.3 Interface Requirements.
  - 9.3.1 Verizon shall provide the following unbundled switching interfaces:

Analog Basic (POTS)- line side, loop start or ground start signaling Analog CENTREX- line side, loop start or ground start signaling Analog PBX - line side, loop start or ground start signaling

Analog DID - trunk side, loop reverse-battery signaling, associated with a PBX DS1 (DID)- trunk side, associated with a PBX DS1 (IOF)- trunk side, associated with dedicated unbundled transport

Additional interfaces may be developed in accordance with the BFR process set forth in this Attachment.

- 9.3.2 Verizon shall offer access to the following at Parity:
  - 9.3.2.1 SS7 signaling or multi-frequency trunking;
  - 9.3.2.2 Access to other third-party carriers.
- 9.4 Integrated Services Digital Network (ISDN)

Implementation of the first customer application of unbundled ISDN switching will require technical and operational coordination and testing by MCIm and Verizon to ensure that the requirements set forth in this section can be met. Should any of these requirements prove technically infeasible, the Parties shall cooperate to determine the requirements applicable to the unbundled service.

- 9.4.1 Technical Requirements ISDN
  - 9.4.1.1 Verizon shall offer data switching providing ISDN that, at a minimum:
    - 9.4.1.1.1 Provides integrated packet handling capabilities at Parity;
    - 9.4.1.1.2 Allows for full 2B+D channel functionality for BRI at Parity; and
    - 9.4.1.1.3 Allows for full 23B+D channel functionality for PRI at Parity.
    - 9.4.1.1.4 Each B channel shall allow for voice, 64 Kbps CSD, and PSD of 128 logical channels at minimum

- speeds of 19 Kbps throughput of each logical channel up to the total capacity of the B channel.
- 9.4.1.1.5 Each B channel shall provide capabilities for alternate voice and data on a per call basis.
- 9.4.1.1.6 The BRI D channel shall allow for call associated signaling, non-call associated signaling and PSD of 16 logical channels at minimum speeds of 9.6 Kbps throughput of each logical channel up to the total capacity of the D channel.
- 9.4.1.1.7 The PRI D channel shall allow for call associated signaling.

#### 9.4.2 Interface Requirements - ISDN

- 9.4.2.1 Verizon shall provide the BRI U interface using 2-wire copper loops in accordance with TR-NWT-000393, January 1991, Generic Requirements for ISDN Basic Access Digital Subscriber Lines.
- 9.4.2.2 Verizon shall provide the BRI interface using digital subscriber loops adhering to Bellcore TR-NWT-303 specifications to interconnect DLCs.
- 9.4.2.3 Verizon shall offer PSD interfaces adhering to the X.25, X.75 and X.75' ANSI and Bellcore requirements.
- 9.4.2.4 Verizon shall offer PSD trunk interfaces operating at 56 kbps.

#### 9.5 Tandem Switching

## 9.5.1 Definition

9.5.1.1 Tandem Switching includes trunk-connect facilities, the basic switching function of connecting trunks to trunks, and the functions that are centralized in tandem switches. Tandem Switching creates a temporary transmission path between interoffice trunks that are interconnected at a Verizon access tandem switch for the purpose of routing a call or calls.

## 9.5.2 Technical Requirements

- 9.5.2.1 Tandem Switching shall provide:
  - 9.5.2.1.1 Signaling to establish a tandem connection;
  - 9.5.2.1.2 Screening and routing at Parity;
  - 9.5.2.1.3 To the extent Technically Feasible and at Parity, Tandem Switching shall provide recording of billable events;

- 9.5.2.1.4 Tandem Switching shall provide AIN triggers supporting AIN features at Parity with its provision of such triggers;
- 9.5.2.1.5 Verizon's Tandem Switching shall provide access to toll free and Number Portability databases in the same manner as it provides such access to itself;
- 9.5.2.1.6 Tandem Switching shall provide all trunk interconnections, where available, in Verizon's access tandems; and
- 9.5.2.1.7 Tandem Switching shall accept connections (including the necessary signaling and trunking interconnections) between end offices, IXCs, ITCs, CAPs and CLEC switches that subtend/interconnect at the same tandem.
- 9.5.2.2 Tandem Switching shall provide local tandeming functionality between two End Offices that subtend/interconnect at the same tandem, including two offices belonging to different CLECs (e.g., between an MCIm end office and the end office of another CLEC).
- 9.5.2.3 Tandem Switching shall preserve CLASS/LASS features and Caller ID as traffic is processed on SS7 trunk groups at Parity. Additional signaling information and requirements are provided in Section 11 of this Attachment.
- 9.5.2.4 Verizon shall perform routine testing and fault isolation on the underlying switch that is providing Tandem Switching and all its interconnections at Parity with its performance of such testing for its own subscriber services. When commonly available, the results of the testing shall be made immediately available to MCIm.
- 9.5.2.5 Tandem Switching shall control congestion using capabilities such as automatic congestion control and network routing overflow. Congestion control provided or imposed on MCIm traffic shall be at Parity with controls being provided or imposed on Verizon traffic for itself and its subscribers.
- 9.5.2.6 Tandem Switching shall route calls to Verizon or MCIm endpoints or platforms for which Tandem Switching is provided. For Tandem Switching with unbundled Shared Transport, call routing including overflow is accomplished as Verizon's network normally routes the calls. For Tandem Switching with unbundled Dedicated Transport, specific routing may be requested through the BFR process.
- 9.5.2.7 Tandem Switching shall process originating toll-free traffic received from an MCIm local switch.
- 9.5.2.8 In support of AIN triggers and features, Tandem Switching shall provide SSP capabilities at Parity with Verizon's provision of these capabilities for its own subscribers under

- the same circumstances when these capabilities are not available from Local Switching.
- 9.5.2.9 The Local Switching and Tandem Switching functions may be combined in an office. If this is done, both Local Switching and Tandem Switching shall provide all of the functionality required of each of those Network Elements in this Agreement.

## 9.6 Interface Requirements

- 9.6.1 Tandem Switching shall interconnect, with direct trunks, to all carriers with which Verizon interconnects.
  - 9.6.1.1 Transit traffic that is originated by an ITC or wireless carrier shall be settled in accordance with the terms of an appropriate IntraLATA Telecommunications Services Settlement Agreement between the Parties. Meet-Point Billing compensation arrangements as described in the Interconnection Attachment shall be utilized for compensation for the joint handling of toll traffic.
  - 9.6.1.2 Verizon expects that most networks involved in transit traffic will deliver each call to each involved network with CCS and the appropriate TCAP message to facilitate full interoperability of those services supported by Verizon and billing functions. In all cases, each Party shall follow the Exchange Message Interface (EMI) standard and exchange records between the Parties and with the terminating carrier to facilitate the billing process to the originating network.
  - 9.6.1.3 Transit traffic to and from MCIm shall be routed over the traffic exchange trunks.
- 9.6.2 Verizon shall provide signaling necessary to provide Tandem Switching with feature functionality impacts and effects at Parity.

## 10 Unbundled Interoffice Facilities

#### 10.1 Shared Transport

### 10.1.1 Definition

10.1.1.1 Shared Transport means the Verizon-provided transmission facilities shared by more than one carrier, including Verizon, between end office switches and Verizon tandem switches, and between tandem switches in Verizon's network. Shared Transport consists of Verizon inter-office transport facilities and is distinct and separate from Local Switching. Shared Transport is not available without the purchase of Local Switching.

#### 10.1.2 Technical Requirements

- 10.1.2.1 Verizon shall be responsible for the engineering, provisioning, and maintenance of the underlying equipment and facilities that are used to provide Shared Transport.
- 10.1.2.2 Pursuant to 47 CFR 51.319(d)(2), Verizon shall provide MCIm with use of all features, functions, and capabilities of Shared Transport that MCIm could use in the provision of telecommunications services.

#### 10.2 Dedicated Transport

#### 10.2.1 **Definition**

- 10.2.1.1 Subject to the change of law provisions of this Agreement, and pursuant to 47 CFR 51.319(d)(1)(i), "Dedicated Transport" means the Verizon transmission facilities, including all Technically Feasible capacity-related services including, but not limited to, DS1, DS3 and OCn levels, where facilities are currently available in Verizon's network, dedicated to a particular customer or carrier, that provide telecommunications between wire centers owned by Verizon or requesting telecommunications carriers.
- 10.2.2 Verizon shall offer unbundled and Non-Discriminatory access to Dedicated Transport.
- 10.2.3 When Dedicated Transport is provided as a circuit, Verizon shall be responsible for the engineering, provisioning, and maintenance of the underlying equipment and facilities that are used to provide Dedicated Transport, and shall engage in such activities at a Non-Discriminatory Basis.
- 10.2.4 Subject to the change of law provisions in this Agreement, and pursuant to 47 CFR 51.319(d)(2)(ii), Verizon shall provide MCIm with use of all Technically Feasible transmission facilities, features, functions and capabilities of Dedicated Transport that MCIm could use in the provision of telecommunications services.
  - 10.2.4.1 Subject to the change of law provisions in this Agreement, and pursuant to 47 CFR 51.319(d)(2)(i), Verizon shall provide MCIm exclusive use of Dedicated Transport facilities, features, functions and capabilities.
  - 10.2.4.2 Subject to the change of law provisions in this Agreement, and pursuant to 47 CFR 51.319(d)(2)(iii), Verizon shall permit, to the extent Technically Feasible, MCIm to connect Dedicated Transport to equipment designated by MCIm, including, but not limited to, MCIm's collocated facilities.

# 10.2.5 Technical Requirements

This Section sets forth technical requirements for all Dedicated Transport.

- 10.2.5.1 Dedicated Transport shall provide MCIm the same survivability/redundancy that Verizon provides itself on a particular route.
- 10.2.5.2 MCIm may request that Verizon provide additional physical diversity. Verizon will provide such physical diversity where it is available, at Verizon's prevailing additional charge, if any. If physical diversity is not reasonably available in response to MCIm's request, then MCIm may order such additional physical diversity by submitting a request for special construction.
- 10.2.5.3 Dedicated Transport shall include DSX terminations at one or both ends, as applicable, in Verizon's Central Office location.
- 10.2.5.4 At the request of MCIm, Verizon shall offer DCS and/or multiplexing together with Dedicated Transport.
- 10.2.6 **Digital Cross Connect System (DCS).** At a minimum, Verizon shall permit MCIm, to the extent Technically Feasible, to obtain the functionality provided by Verizon's DCS in the same manner that Verizon provides such functionality to interexchange carriers.
  - 10.2.6.1 **Definition.** DCS is a device which provides electronic cross-connection of digital signal level 0 (DS0) or higher transmission bit rate digital channels within physical interface facilities. Types of DCSs include, but are not limited to, DCS 1/0s, where the nomenclature 1/0 denotes interfaces typically at the DS1 rate or greater with cross-connection typically at the DS0 rate.

## 10.2.6.2 DCS Technical Requirements

- 10.2.6.2.1 DCS shall provide cross-connection of the channels designated by MCIm, either through service orders or by using Verizon's Intellimux capabilities.
- 10.2.6.2.2 Verizon shall continue to administer and maintain DCS, including updates to the control software to current available releases, at Parity.
- 10.2.6.2.3 Verizon shall provide various types of Digital Cross-Connect Systems including:
  - 10.2.6.2.3.1 DS0 cross-connects (typically termed DCS 1/0).
  - 10.2.6.2.3.2 Additional DCS types shall be requested in accordance with the BFR process set forth in this Attachment.
- 10.2.6.2.4 Through Verizon's Intellimux service capabilities, Verizon shall provide immediate and continuous

configuration and reconfiguration of the channels between the physical interfaces (i.e., Verizon shall establish the processes to implement cross-connects on demand, or permit MCIm control of such configurations and reconfigurations).

- 10.2.6.2.5 Through Verizon's Intellimux service capabilities, Verizon shall provide scheduled configuration and reconfiguration of the channels between the physical interfaces (i.e., Verizon shall establish the processes to implement cross-connects on the schedule designated by MCIm, or permit MCIm to control such configurations and reconfigurations).
- 10.2.6.2.6 DCS shall continuously monitor protected circuit packs and redundant common equipment at Parity.
- 10.2.6.2.7 DCS shall automatically switch to a protection circuit pack on detection of a failure or degradation of normal operation at Parity.
- 10.2.6.2.8 The equipment used to provide DCS shall be equipped with a redundant power supply or a battery back-up at Parity.
- 10.2.6.2.9 Verizon shall make available for DCSs handling MCIm services, spare facilities, and equipment at Parity, necessary for provisioning repairs.
- 10.2.6.2.10 Through Verizon's Intellimux service capabilities, at MClm's option, Verizon shall provide MClm currently available performance monitoring and alarm data.
- 10.2.6.2.11 At MCIm's option, Verizon shall provide MCIm with the ability to initiate tests on DCS equipment. This will require MCIm to provide additional facilities from the DCS, back to MCIm's test center. The DCS can then be used to connect MCIm's test center ports to other MCIm circuits.
- 10.2.6.2.12 Where available, DCS shall provide multipoint bridging of multiple channels to other DCSs.

  MCIm may designate multipoint bridging to be one-way broadcast from a single master to multiple tributaries, or two-way broadcast between a single master and multiple tributaries.
- 10.2.6.2.13 DCS shall multiplex lower speed channels onto a higher speed interface and demultiplex higher speed channels onto lower speed interfaces as designated by MCIm.

## 11 Signaling Networks and Call-Related Databases

## 11.1 Signaling

- 11.1.1 Signaling Protocol. Unless otherwise indicated in this Agreement or specified by MCIm, the Parties will interconnect their networks using SS7 signaling as defined in Bellcore documents GR-905-CORE, Issue 1, March 1995, Bellcore Special Report SR-TSV-002275, BOC Notes on the LEC Networks-Signaling, Bellcore Generic Requirements GR-317, Issue 1, February 1994 and GR-394, Issue 1, February 1994, including ISDN User Part (ISUP) for trunk signaling and Transaction Capabilities Application Part (TCAP) for CCS-based features in the Interconnection of their networks. Either Party may establish CCS Interconnections either directly or through a third party.
- 11.1.2 The Parties will provide CCS to each other in conjunction with all trunk groups supporting intraLATA, local, transit, and toll traffic. CCS will not be provided in conjunction with trunk groups supporting Operator Services (Call Completion and Directory Assistance), 911, or where CCS has not been deployed by the originating carrier. The Parties will cooperate on the exchange of TCAP messages to facilitate full interoperability of CCS-based features between their respective networks, including all CLASS features and functions, to the extent each carrier offers these features and functions to its own End Users. All CCS signaling parameters will be provided, including, but not limited to, Automatic Number Identification (ANI), originating line information (OLI), calling party category, Charge Number, etc. For terminating FGD, Verizon will pass CPN if it receives CPN from FGD carriers. All privacy indicators will be honored. Where available, the Parties will provide network signaling information such as Transit Network Selection (TNS) parameter, Carrier Identification Codes (CIC), CCS platform, and CIC/OZZ information (non-CCS environment) at no charge wherever this information is needed for call routing or billing. The Parties will generally conform to OBF adopted guidelines pertaining to TNS and CIC/OZZ codes.
- 11.1.3 Refer to this Attachment, Section 11.3 for detailed terms of SS7 Network Interconnection.
- 11.1.4 Unless otherwise indicated in this Agreement, all interconnection facilities shall be 64Kbps Clear Channel Capability (CCC) and Extended Super Frame with Bipolar 8 Zero Substitution line coding (ESF B8ZS). Where ESF B8ZS is not currently available, MCIm may agree to use other interconnection protocols on an interim basis until the standard ESF B8ZS is available. Verizon shall, at a planning meeting between the Parties, provide any anticipated dates of availability for those areas where ESF B8Z5 is not available.

## 11.2 Signaling Link Transport

#### 11.2.1 Definition

11.2.1.1 Verizon's CCS Access Service (CCSAS) allows interconnected carriers to exchange signaling information over a communications path which is separate from the message

- path. The transport portion of CCSAS is provided via a discretely rated dedicated 56 kbps out of band signaling connection between the carrier's Signaling Point of Interconnection (SPOI) and Verizon's STP.
- 11.2.1.2 Each CCSAS signaling connection provides for two-way digital transmission at speeds of 56 kbps. The connection to Verizon's STP pair can be made from either the carrier's signaling point (SP), which requires a minimum of two 56 kbps circuits, or from the carrier's STP pair, which requires a minimum of four (4) pairs of 56 kbps circuits.
- 11.2.1.3 STP locations are set forth in National Exchange Carrier Association (NECA) Tariff F.C.C. No. 4. Carriers ordering CCSAS are subject to the technical requirements specified in ANSI T1M1.3 and VZ905 Supplement (Issue 1, June 2001) and any subsequent issues and revisions. See ANSI T1M1.3 and VZ905 Supplement (Issue 1, June 2001) and any subsequent issues and revisions for testing and certification reference documentation.
- 11.2.1.4 Each Party shall provide the other Party with access to databases and associated signaling necessary for call routing and completion by providing SS7 CCS interconnection in accordance with existing Tariffs, and interconnection and access to toll free databases, LIDB, and any other necessary databases in accordance with existing Tariffs and/or agreements with other unaffiliated carriers. Alternatively, either Party may secure CCS Interconnection from a commercial SS7 hub provider, and in that case the other Party will permit the purchasing Party to access the same databases as would have been accessible if the purchasing Party had connected via SS7 CCS directly to the other Party's CCS network.
- 11.2.1.5 Verizon shall permit MCIm to access Verizon's LIDB to validate calling card numbers and requests for bill-to-third-party or collect billing. Verizon shall provide LIDB access at Parity and in a Non-Discriminatory manner by a SS7 formatted data query before call completion to determine the validity of the billing method requested by the caller. LIDB will respond with a SS7 formatted confirmation of validity or denial of the requested billing option.
- 11.2.1.6 The Parties will provide CCS Signaling to one another, where and as available, in conjunction with all local traffic, toll traffic, meet point billing traffic, and transit traffic. The Parties will cooperate on the exchange of TCAP messages to facilitate interoperability of CCS-based features between their respective networks, including all CLASS features and functions, to the extent each Party offers such features and functions to its subscribers. All CCS signaling parameters will be provided upon request (where available), including called party number, Calling Party Number, originating line information, calling party category, and Charge Number. All privacy indicators will be honored. The Parties will follow all

relevant OBF adopted guidelines pertaining to CIC/OZZ codes. Where CCS Signaling is not available, in-band multi-frequency (MF) wink start signaling will be provided. Any such MF arrangement will require a separate local trunk circuit between the Parties' respective Switches. In such an arrangement, each Party will outpulse the full ten-digit telephone number of the called party to the other party with appropriate call set-up and ANI where available, at Parity.

- 11.2.1.7 The following publications describe the practices, procedures and specifications generally utilized by Verizon for signaling purposes and are listed herein to assist the Parties in meeting their respective interconnection responsibilities related to signaling:
  - 11.2.1.7.1 Bellcore GR-905-CORE, Issue 1, March 1995, and subsequent issues and revisions;
  - 11.2.1.7.2 Verizon Supplement Common Channel Signaling Network Interface Specification, VZ905 Supplement (Issue 1, June 2001) and any subsequent issues and revisions;
  - 11.2.1.7.3 Verizon AIN SMS Network Disclosure (Date: December 1996, on Verizon World Wide Web site).
- 11.2.1.8 Each Party shall charge the other Party mutual and reciprocal rates for CCS Signaling as follows: Verizon shall charge MCIm in accordance with the Pricing Attachment to this Agreement and applicable Tariffs; MCIm shall charge Verizon rates equal to the rates Verizon charges MCIm, unless MCIm's Tariffs for CCS signaling provide for lower generally available rates, in which case MCIm shall charge Verizon such lower rates.
- 11.2.1.9 MCIm must meet interconnection certification testing requirements of the SS7 network before interconnection is permitted, and also before changes occur within the MCIm SS7 network.

#### 11.3 Signaling Transfer Points (STPs)

#### 11.3.1 Definition

- 11.3.1.1 Verizon's CCSAS allows interconnected carriers to exchange signaling information over a communications path which is separate from the message path. The discretely rated network termination point where this interconnection takes place is called the Verizon SPOI.
- 11.3.1.2 Each CCSAS signaling connection provides for two-way digital transmission at speeds of 56 kbps. The connection to Verizon's STP pair can be made from either the carrier's SSP, which requires a minimum of two (2) 56 kbps circuits, or from the carrier's STP pair, which requires a minimum of four (4) pairs of 56 kbps circuits.

11.3.1.3 STP locations are set forth in National Exchange Carrier Association (NECA) Tariff F.C.C. No. 4. Carriers ordering CCSAS are subject to the technical requirements specified in ANSI T1M1.3 and VZ905 Supplement (Issue 1, June 2001) and any subsequent issues and revisions. See ANSI T1M1.3 and VZ905 Supplement (Issue 1, June 2001) and any subsequent issues and revisions) for testing and certification reference documentation).

#### 11.3.2 Technical Requirements

- 11.3.2.1 STPs shall provide access to all other Network Elements connected to the Verizon network and third party carriers with which MCIm has a legitimate signaling relationship. These include:
  - 11.3.2.1.1 Verizon Local Switching or Tandem Switching;
  - 11.3.2.1.2 Verizon Service Control Points/databases;
  - 11.3.2.1.3 Third party local or Tandem switching systems; and
  - 11.3.2.1.4 Third party provided STPs.
- 11.3.2.2 The connectivity provided by STPs shall fully support the functions of all other Network Elements connected to the Verizon SS7 network and third party carriers with which MCIm has a legitimate signaling relationship. This explicitly includes the use of the Verizon SS7 network to convey messages which neither originate nor terminate at a signaling end point directly connected to the Verizon SS7 network (i.e., transit messages). When the Verizon SS7 network is used to convey transit messages, there shall be no alteration of the integrated services digital network user part (ISDNUP) or Transaction Capabilities Application Part (TCAP) user data that constitutes the content of the message.
- 11.3.2.3 If a Verizon Tandem Switch routes calling traffic, based on dialed or translated digits, on SS7 trunks between an MClm local Switch and third-party local Switch, Verizon's SS7 network shall convey the TCAP messages that are necessary to provide call management features (automatic callback, automatic recall, and screening list editing) between the MClm local STPs and the STPs that provide connectivity with the third-party local Switch, even if the third-party local Switch is not directly connected to Verizon's STPs, providing that the third-party Switch is located in the same LATA.
- 11.3.2.4 Before Verizon transits TCAP messages to third parties, MCIm shall provide Verizon with a letter of authorization from third party carriers to and from which Verizon will transit TCAP messages. Such letter of authorization must state that the third party carrier will accept TCAP messages from Verizon that originated on MCIm's network.

11.3.2.5 In cases where the destination signaling point is a Verizon local or Tandem Switching system or database, or is an MCIm or third-party local or Tandem Switching system directly connected to Verizon's SS7 network, Verizon STPs shall perform final GTT of messages to the destination and SCCP Subsystem Management of the destination. In all other cases, STPs shall perform intermediate GTT of messages to a gateway pair of STPs in an SS7 network connected with the Verizon SS7 network, and shall not perform SCCP subsystem management of the destination. Notwithstanding the foregoing, Verizon shall not be required to perform GTT if its applicable STP is not capable of performing GTT.

#### 11.3.3 Interface Requirements

- 11.3.3.1 Verizon shall provide the following STPs options to connect MCIm or MCIm-designated Local Switching systems or STPs to the Verizon SS7 network:
- 11.3.3.2 An A-link interface from MCIm Local Switching systems; and,
- 11.3.3.3 Each type of interface shall be provided by one or more sets (layers) of signaling links, as follows:
  - 11.3.3.3.1 An A-link layer shall consist of two links.
  - 11.3.3.3.2 The Signaling Point of Interconnection (SPOI) for each link shall be located at a cross-connect element, such as a DSX-1, in the Central Office where the Verizon STP is located. There shall be a DS1 or other mutually agreed upon transport interface at each of the SPOIs. Each signaling link shall appear as a DS0 channel within the interface.

#### 11.3.4 Message Screening

- 11.3.4.1 Verizon shall set message screening parameters so as to accept messages from MCIm local or tandem switching systems destined to any signaling point in the Verizon SS7 network with which the MCIm switching system has a legitimate signaling relation.
- 11.3.4.2 Verizon shall set message screening parameters so as to accept messages from MCIm local or tandem switching systems destined to any signaling point or network interconnected to the Verizon SS7 network with which the MCIm switching system has a legitimate signaling relation.
- 11.3.4.3 Verizon shall set message screening parameters so as to accept messages destined to an MCIm local or tandem switching system from any signaling point or network interconnected to the Verizon SS7 network with which the MCIm switching system has a legitimate signaling relation.
- 11.3.4.4 Verizon shall set message screening parameters so as to accept and send messages destined to an MCIm SCP from

any signaling point or network interconnected to the Verizon SS7 network with which the MClm SCP has a legitimate signaling relation, provided Verizon receives proper notification and agreement from the owner of such other networks.

## 11.3.5 STP Requirements

- 11.3.5.1 Verizon shall provide MTP and SCCP protocol interfaces in accordance with sections relevant to the MTP or SCCP in the following specifications:
  - 11.3.5.1.1 Bellcore GR-905-CORE, Issue 1, March 1,
    Common Channel Signaling Network Interface
    Specification (CCSNIS) Supporting Network
    Interconnection, Message Transfer Part (MTP),
    and Integrated Services Digital Network User Part
    (ISDNUP); and
  - 11.3.5.1.2 VZ905 Supplement (Issue 1, June 2001) and any subsequent issues and revisions.

#### 11.4 Call Related Databases and AIN

#### 11.4.1 Definition

- 11.4.1.1 "Call Related Databases" are the Network Elements that provide the functionality for storage of, and access to, information required to route and complete a particular call. Call Related Databases include, but are not limited to: LIDB, Toll Free Number Database, Calling Name database, number portability databases, 911 and E911 databases, and AIN databases.
- 11.4.1.2 A Service Control Point (SCP) is a specific type of database Network Element deployed in a Signaling System 7 (SS7) network that executes service application logic in response to SS7 queries sent to it by a switching system also connected to the SS7 network.

## 11.4.2 Technical Requirements for Call Related Databases

Requirements for Call Related Databases within this section address storage of information, access to information (e.g., signaling protocols, response times), and administration of information (e.g., provisioning, administration, and maintenance). All Call Related Databases shall be provided to MCIm in accordance with the following requirements, except where such a requirement is superseded by specific requirements set forth in Subsections 11.5 through 11.7:

11.4.2.1 Verizon shall provide physical interconnection to SCPs through the SS7 network and protocols, as specified in Section 11.3 of this Attachment, with TCAP as the application layer protocol.

- 11.4.2.1.1 Verizon shall provide physical interconnection to databases via existing interfaces and industry standard interfaces and protocols.
- 11.4.2.2 The reliability of interconnection options shall be consistent with requirements for diversity and survivability as specified in Section 11.3 of this Attachment (which applies to both SS7 and non-SS7 interfaces).
- 11.4.2.3 Call Related Database functionality shall be available at Parity. If, based on information available through the process set forth in Section 11.1, MCIm believes the functionality is inadequate to meet its needs, it may initiate a BFR.
- 11.4.2.4 Verizon shall complete database transactions (i.e., add, modify, delete) for MCIm subscriber records stored in Verizon databases at Parity.
- 11.4.2.5 Verizon shall provide database maintenance consistent with the maintenance requirements as specified in this Agreement (e.g., notification of Verizon network affecting events, testing).
- 11.4.2.6 Verizon shall provide billing and recording information to track database usage consistent with connectivity billing and recording requirements for Call Related Databases as specified in this Agreement (e.g., recorded message format and content, timeliness of feed, data format and transmission medium).
- 11.4.2.7 Verizon shall provide Call Related Databases in accordance with the physical security requirements specified in this Agreement.
- 11.4.2.8 Verizon shall provide Call Related Databases in accordance with the logical security requirements specified in this Agreement.

## 11.5 Line Information Database (LIDB)

This Section 11.5 defines and sets forth additional requirements for the Line Information Database. This Subsection 11.5 supplements the other requirements of Section 11.

#### 11.5.1 Definition

LIDB is a transaction-oriented database accessible through CCS networks. It contains records associated with subscriber line numbers and special billing numbers (in accordance with the requirements in the technical reference in GR-1158-CORE OSSGR, Section 22.3). LIDB accepts queries from other Network Elements, or MCIm's network, and provides appropriate responses. The query originator need not be the owner of LIDB data. LIDB queries include functions such as screening billed numbers that provides the ability to accept collect or third number billing calls and validation of telephone line number based non-proprietary calling cards. The interface for the LIDB functionality is the interface between the Verizon CCS network and other CCS networks.

LIDB also interfaces to administrative systems. The administrative system interface provides Verizon work centers with an interface to LIDB for functions such as provisioning, auditing of data, access to LIDB measurements and reports.

- 11.5.2 Technical Requirements
  - 11.5.2.1 Intentionally Left Blank
  - 11.5.2.2 Intentionally Left Blank
  - 11.5.2.3 Verizon shall enable MCIm to store in Verizon's LIDB any subscriber line number or special billing number record (in accordance with the technical reference in GR-1158-CORE OSSGR, Section 22.3), whether ported or not, regardless of the number's NPA-NXX or NXX-0/IXX, in accordance with standard industry practices.
  - 11.5.2.4 Verizon shall perform the following LIDB functions (i.e., processing of the following query types as defined in the technical reference in GR-1158-CORE OSSGR, Section 22.3) for MCIm's subscriber records in LIDB:
    - 11.5.2.4.1 Billed number screening (provides information such as whether the billed number may accept collect or third number billing calls); and
    - 11.5.2.4.2 Calling card validation.
  - 11.5.2.5 Verizon shall process MClm's subscriber records in LIDB at least at Parity with Verizon subscriber records, with respect to other LIDB functions (as defined in the technical reference in GR-1158-CORE OSSGR, Section 22.3). Verizon shall indicate to MClm what additional functions (if any) are performed by LIDB in Verizon's network.
  - 11.5.2.6 Within two (2) weeks after a request by MCIm, Verizon shall provide MCIm with a list of the subscriber data items which MCIm would have to provide in order to support billed number screening and calling card validation. The list shall indicate which data items are essential to LIDB function, and which are required only to support certain services. For each data item, the list shall show the data formats, the acceptable values of the data item and the meaning of those values.
  - 11.5.2.7 Verizon shall provide LIDB systems with rates of operating deficiencies at Parity. If, based on information available through the process set forth in Section 11.1, MCIm believes that the rate of deficiencies is inadequate to meet its needs, it may initiate a BFR.
  - 11.5.2.8 Verizon shall provide MCIm with the capability to provision (e.g., to add, update, and delete) NPA-NXX and NXX-0/IXX group records, and line number and special billing number records, associated with MCIm subscribers, directly into Verizon's LIDB provisioning process.

- 11.5.2.9 As directed by MCIm, in the event that end user subscribers change their local service provider, Verizon shall maintain subscriber data (for line numbers, card numbers, and for any other types of data maintained in LIDB), as mutually agreed by the Parties, so that such subscribers shall not experience any interruption of service, except for any interruption associated with a LIDB-only service order transaction at Parity. MCIm shall submit LIDB updates on a timely basis.
- 11.5.2.10 All additions and updates of MCIm data to the LIDB shall be solely at the direction of MCIm. Verizon will process orders from other CLECs or from Verizon for subscribers that choose to migrate from MCIm to another provider.
- 11.5.2.11 Verizon shall provide priority updates to LIDB for MCIm data upon MCIm's request (e.g., to support fraud protection) at Parity.
- 11.5.2.12 Verizon shall accept queries to LIDB associated with MCIm subscriber records, and shall return responses in accordance with the requirements of this Section 11.5.

#### 11.6 Toll Free Number Database

The "Toll Free Number Database" is an SCP that provides functionality necessary for toll free (e.g., 800 and 888) number services by providing routing information and additional features during call set-up in response to queries from SSPs. This Section 11.6 supplements the other requirements of Section 11. Verizon shall provide the Toll Free Number Database in accordance with the following:

## 11.6.1 Technical Requirements

- 11.6.1.1 Verizon shall make the Verizon Toll Free Number Database available for MCIm to query, from MCIm's designated switch including Local Switching, with a toll-free number and originating information.
- 11.6.1.2 The Toll Free Number Database shall return carrier identification and, where applicable, the queried toll free number, translated numbers and instructions as it would in response to a query from a Verizon switch.

## 11.6.2 Interface Requirements

The signaling interface between the MCIm or other local switch and the Toll Free Number Database shall use the TCAP protocol, together with the signaling network interface.

- 11.7 Advanced Intelligent Network (AIN) Access, Service Creation Environment and Service Management System (SCE/SMS) Advanced Intelligent Network Access
  - 11.7.1 Verizon shall provide access to any and all non-proprietary Verizon service applications resident in Verizon's SCP. At MCIm's request,

- Verizon shall identify to MCIm any proprietary services and the basis for such designation. Such access may be from MCIm's switch or Verizon's unbundled local switch.
- 11.7.2 SCE/SMS AIN access shall provide MCIm the ability to create service applications in the Verizon SCE and deploy those applications via the Verizon SMS to the Verizon SCP using the same processes Verizon uses to deploy its own AIN-based services. This interconnection arrangement shall provide MCIm access to the Verizon development environment in a manner at least at Parity with Verizon's ability to deliver its own AIN-based services. SCE/SMS AIN Access is the creation and provisioning of AIN services in the Verizon network.
- 11.7.3 Verizon shall make SCE hardware, software, testing and technical support (e.g., help desk, system administrator) resources available to MCIm. Scheduling of SCE resources shall allow MCIm at least equal priority to Verizon.
- 11.7.4 The Verizon SCE/SMS shall allow for multi-user access. Source code (i.e., AIN service applications and process flow design developed by an MCIm service designer/creator to provide AIN based services) management and other logical security functions will be provided.
- 11.7.5 Verizon shall provide reasonable protection to MCIm service logic and data from unauthorized access, execution or other types of compromise.
- 11.7.6 Verizon or a designated vendor shall provide for service creation training, documentation, and technical support of MCIm development staff at Parity with that provided to Verizon's own development staff. Training sessions shall be "suitcased" to MCIm facilities or delivered at Verizon facilities at MCIm's cost, at MCIm's discretion, subject to vendor's requirements.
- 11.7.7 When MCIm selects SCE/SMS AIN access, Verizon shall provide for a secure, controlled access environment on-site as well as via remote data connections (i.e., ISDN circuit switched data).
- 11.7.8 When MCIm selects SCE/SMS AIN access, Verizon shall allow MCIm to transfer data forms and/or tables to the Verizon SCP via the Verizon SMS (e.g., service customization and subscriber subscription) in a manner consistent with how Verizon provides that capability to itself.
- 11.7.9 When MCIm selects SCE/SMS AIN access for providing services on MCIm's network, the Parties will work cooperatively to resolve technical and provisioning issues.
- 11.8 Cailing Name (CNAM) Database. The "CNAM Database" means the databse in which Verizon stores subscriber information (including name and telephone number) used to show the customer name of an incoming call on a display attached to the telephone whether or not such database contains exclusively CNAM information. Verizon shall provide MCIm with access to Verizon's CNAM Database in accordance with the following:
  - 11.8.1 Verizon shall provide to MCIm all subscriber records used by Verizon to create and maintain its CNAM database, in a Non-Discriminatory

- manner. MClm may combine this Network Element with any other Network Element for the provision of any Telecommunications Service.
- 11.8.2 Verizon shall provide MClm all ILEC, CLEC, and independent telco subscriber records used by Verizon within its CNAM database in a nondiscrimatory manner. Verizon shall provide MClm with a complete list of the ILECs, CLECs, and independent telcos whose subscriber information is contained in the Verizon CNAM database.
- 11.8.3 Verizon shall provide CNAM information at cost-based rates as required by Applicable Law and on the same terms and conditions that Verizon provides to itself, its Affiliates, or any third party.

## 12 Operations Support Systems

Verizon shall provide MCIm with access via electronic interfaces to databases required for pre-ordering, ordering, provisioning, maintenance and repair, and billing. All such transactions shall be submitted by MCIm through such electronic interfaces, unless Verizon's electronic interfaces are non-operative.

## 13 Network Element Bona Fide Request (BFR)

- Verizon shall promptly consider and analyze access to a new unbundled Network Element in response to the submission of a Network Element Bona Fide Request by MCIm hereunder. The Network Element Bona Fide Request process set forth herein does not apply to those services requested pursuant to Report & Order and Notice of Proposed Rulemaking 91-141 (rel. Oct. 19, 1992) ¶ 259 and n.603 or subsequent orders.
- 13.2 A Network Element Bona Fide Request shall be submitted in writing and shall include a technical description of each requested Network Element.
- 13.3 MCIm may cancel a Network Element Bona Fide Request at any time, but shall pay Verizon's reasonable and demonstrable costs of processing and/or implementing the Network Element Bona Fide Request up to the date of cancellation. Verizon shall provide MCIm written notice if the costs of processing or implementing a Network Element Bona Fide Request exceed, or Verizon anticipates such costs will exceed, five thousand dollars (\$5,000.00).
- 13.4 Within ten (10) business days of its receipt, Verizon shall acknowledge receipt of the Network Element Bona Fide Request.
- 13.5 Except under extraordinary circumstances, within thirty (30) days of its receipt of a Network Element Bona Fide Request, Verizon shall provide to MCIm a preliminary analysis of such Network Element Bona Fide Request. The preliminary analysis shall confirm that Verizon will offer access to the Network Element or will provide a detailed explanation that access to the Network Element is not Technically Feasible and/or that the request does not qualify as a Network Element that is required to be provided by Applicable Law.
- 13.6 If Verizon determines that the Network Element Bona Fide Request is Technically Feasible and access to the Network Element is required to be provided by Applicable Law, Verizon shall promptly proceed with developing the Network Element Bona Fide Request upon receipt of written authorization from MClm. When it receives such authorization, Verizon shall promptly develop the requested services, determine their availability, calculate the applicable prices

and establish installation intervals. Unless the Parties otherwise agree, the Network Element requested must be priced in accordance with Section 252(d)(1) of the Act.

- 13.7 As soon as feasible, but not more than ninety (90) days after its receipt of authorization to proceed with developing the Network Element Bona Fide Request, Verizon shall provide to MCIm a Network Element Bona Fide Request quote which will include, at a minimum, a description of each Network Element, the availability, the applicable rates, and the installation intervals.
- 13.8 Within thirty (30) days of its receipt of the Network Element Bona Fide Request quote, MCIm must either confirm its order for the Network Element Bona Fide Request pursuant to the Network Element Bona Fide Request quote or seek arbitration by the Commission pursuant to Section 252 of the Act.
- 13.9 If a Party to a Network Element Bona Fide Request believes that the other Party is not requesting, negotiating or processing the Network Element Bona Fide Request in good faith, or disputes a determination, or price or cost quote, or is failing to act in accordance with Section 251 of the Act, such Party may seek mediation or arbitration by the Commission pursuant to Section 252 of the Act.

#### 14 Cooperative Testing

MCIm and Verizon shall perform testing of UNEs in accordance with generally accepted industry standards and practices for equivalent retail services. Upon reasonable request, based on maintenance and/or billing history, the Parties shall cooperate with respect to testing, trouble isolation and correction in connection with such history.

#### 15 Maintenance of UNEs.

If (a) MCIm reports to Verizon a customer trouble, (b) MCIm requests a dispatch, (c) Verizon dispatches a technician, and (d) such trouble was not caused by Verizon's facilities or equipment in whole or in part, then MCIm shall pay Verizon a charge set forth in the Pricing Attachment for time associated with said dispatch. In addition, this charge also applies when the customer contact as designated by MCIm is not available at the appointed time. MCIm accepts responsibility for initial trouble isolation and providing Verizon with appropriate dispatch information based on its test results. If, as the result of MCIm instructions, Verizon is erroneously requested to dispatch to a site on Verizon company premises ("dispatch in"), a charge set forth in the Pricing Attachment will be assessed per occurrence to MCIm by Verizon. If as the result of MCIm instructions, Verizon is erroneously requested to dispatch to a site outside of Verizon company premises ("dispatch out"), a charge set forth in the Pricing Attachment will be assessed per occurrence to MCIm by Verizon. Verizon agrees to respond to MCIm trouble reports on a non-discriminatory basis consistent with the manner in which it provides service to its own retail customers or to any other similarly initiated Telecommunications Carrier.

## 16 Rates and Charges

The prices for Network Elements are set forth in the Pricing Attachment of this Agreement.

# 17 Technical Standards and Technical Specifications for Network Elements

17.1 Each Network Element shall be furnished at the service levels included in this Agreement and in accordance with the performance standards required in this Agreement.

- 17.2 Each Network Element provided by Verizon to MCIm, unless identified differently in this Agreement, shall be provided at least equal in quality to that which Verizon provides to itself and in a Non-Discriminatory manner in the areas of: quality of design, performance, features, functions, capabilities and other characteristics, including, but not limited to, levels and types of redundant equipment and facilities for power, diversity and security, that Verizon provides to itself (where applicable and Technically Feasible), Verizon's own subscribers (where applicable and Technically Feasible), to a Verizon Affiliate, or to any other entity, as set forth in the FCC Rules and Regulations, as the same may be amended from time to time.
  - 17.2.1 Verizon shall provide to MCIm, upon reasonable request, reasonably available engineering, design, performance and other network data sufficient for MCIm to determine that the requirements of this Section 17 are being met. In the event that such data indicates that the requirements of this Section 17 are not being met, the Parties shall in good faith endeavor to address the issue at the network operations supervisor level.
- 17.3 Unless the Parties otherwise agree, each Network Element and the connections between Network Elements provided by Verizon to MCIm shall be made available to MCIm at Parity and in a Non-Discriminatory manner at the points identified in this Agreement, or additional points made available through the BFR process.